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Age-Related Features of the Manifestation of Dental Hard Tissues Hypersensitivity in Elderly People in the City of Bukhara

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Abstract: Hypersensitivity of teeth is one of the most urgent problems of modern dentistry, as it is a common pathological condition among people of adult age groups. It is characterized by an acute painful reaction of the dentine tubules to thermal, chemical and tactile effects. According to various sources, the prevalence of dentine hypersensitivity in the adult population varies from 20 to 74%. So, in our country, 45-70% of the population have various forms of dental hypersensitivity. The etiological factors causing the sensitivity of the hard tissues of the teeth are very numerous, they can be divided into general and local. A significant role in the development of hypersensitivity is played by non-carious lesions of the hard tissues of the teeth, as well as caries and periodontal diseases. In general, this pathology causes inconvenience and worsens the quality of life of patients.

Keywords: hypersensitivity of the hard tissues of the tooth, non-carious lesions of the teeth, dentistry, age characteristics, clinical course features, adult.

Relevance. Hypersensitivity of teeth refers to one of the most common dental diseases and, according to WHO, is constantly growing. In our country, according to recent studies, 50-70% of the population aged 20 to 65 years suffers from various forms of hypersensitivity of hard dental tissues. Today, there are several theories of the occurrence of hypersensitivity of hard tissues of teeth: odontoblastic, receptor, neuro-reflex, threshold, hydrodynamic. The most significant hypothesis about the mechanism of hypersensitivity, which most researchers adhere to, is the hydrodynamic theory, modified by M.Brannstorm and A. Astron 1964.. Hypersensitivity can develop when eating sour, sweet, salty, cold or hot, when brushing teeth, touching tools, which causes a feeling of discomfort; and it cannot be attributed to any form of defect or pathology of the tooth. According to etiological factors, hypersensitivity associated with the loss of hard tissues of the tooth and not associated with the loss of hard tissues of the tooth are distinguished. At the same time, each of these options can manifest itself in a limited or generalized systemic form. In addition, it is very important to note the age of patients with the development of this pathology, since for the most part this disease manifests itself in elderly and senile adults aged 50-70 years.

The purpose of the study. To study the prevalence of dental hard tissue hypersensitivity in adults of different age groups and to identify the features of the course of this pathology in elderly and senile patients.

Materials and methods. To determine the frequency of occurrence and features of the clinical course of dental hard tissue hypersensitivity in elderly and senile people, an in-depth dental examination of 28 (50%) men and 28 (50%) women aged 50 to 70 years from the city of Bukhara was conducted (Table.

1), who were divided into 2 groups: middle—aged — from 50 to 59 years; elderly - from 60 to 70 years.

Table 1. Number and age of people subjected to epidemiological dental examination.

Middle age		Old age		total
males	**females**	**males**	**females**	
14	14	14	14	56
28(50%)		28(50%)		100%

During the clinical examination, a survey of patients was conducted, anamnesis of life and general status, professional characteristics of patients' work, as well as their complaints about the condition of teeth and chewing apparatus in general were found out. An examination of the appearance of the patient's face and oral cavity was performed using a dental mirror and a probe. If the patient had non-carious lesions, the condition of internal organs and body systems was determined on the basis of anamnesis and medical documents submitted by patients. When detecting erosions of hard tissues of teeth, the clinical form of their course was determined: localized or generalized; with loss of hard tissues of the tooth and without loss of hard tissues of the tooth. When detecting dental hard tissue hypersensitivity in patients, the prevalence index of dental hypersensitivity (PIDH) and the intensity of dental hypersensitivity (IIDH) were also calculated, and the severity of the disease was also taken into account, according to the recommendations of dental specialists. The frequency of occurrence of hypersensitivity, as well as the frequency of its combination with other forms of non-carious dental lesions in people of different age groups was determined as a percentage.

Results and discussion. The results of the study showed that increased pain sensitivity of the hard tissues of the teeth during a clinical examination of 56 (28 men and 28 women) adults of different age groups was detected in 40 (71.42%) people. Among middle-aged people, 18 (42.8%) people from 28 of the same age group suffered from dental hard tissue hypersensitivity (DHTH), including 10 (71.42%) men and 8 (57.14%) women. At the same time, in 10 (55.56%) people (6 (60%) men and 4 (50%) women), dental hypersensitivity was associated with the loss of their hard tissues, and in 8 (44.44%) people (5(50%) men and 3 (37.5%) women), the occurrence of hypersensitivity was not it was associated with the loss of hard tissues of the teeth, and here we can talk about the functional insufficiency of tooth enamel. In middle age, the localized form of hypersensitivity was observed in 8 (44.44%) people, including 3 (30%) men and 5 (62.5%) women, and the generalized form was diagnosed in 10 (55.55%) cases, including 6(60%) men and 4(50%) women. Grade 1 hypersensitivity was rare in middle age and was detected in 3 (16.67%) people out of 18 patients, including 2 (20%) men and 1 (12.5%) women. This pathology of the 2nd degree was more often diagnosed in middle age. Thus, grade 2 hypersensitivity was detected in 11 (61.11%) people, 5 (50%) men and 6 (75%) women. Hypersensitivity of the 3rd degree was somewhat less common in middle-aged people — in 22.22% (in 4 people, including 2 (20%) men and 2 (25%) women). The index of hypersensitivity prevalence (PIDH) of more than 25% was detected in people of the middle age group in 12 cases (66.67%), including 7 (70%) men and 5 (62.5%) women. In the remaining 6 (33.33%) people, including 3 (30%) men and 3 (37.5%) women, the PDH index was up to 25%, which indicated the presence of a localized form of hypersensitivity of hard tooth tissues in these patients of the middle age group. The index of intensity of dental hypersensitivity (IIDH), as well as in young people, did not depend on gender and averaged 2.16+0.12 in middle-aged people, which indicated that they had grade 2 hypersensitivity.

Among the elderly, 22 (78.57%) people from 28 of the same age group suffered from dental hard tissue hypersensitivity (DHTH), including 11 (78.57%) men and 11 (78.57%) women. At the same time, in 18 (82%) people (10 (90.9%) men and 8 (72.72%) women) dental hypersensitivity was associated with the loss of their hard tissues, and in 4 (18.18%) people (1 (9.09%) men and 3 (27.27%) women) the occurrence of hypersensitivity was not it was associated with the loss of hard tissues of the teeth. In old age, the localized form of hypersensitivity was observed in 13 (59.1%) people, including 6 (56.84%) men and 7 (58.19%) women, and the generalized form was diagnosed in 9 (40.9%) cases, including 5 (45.45%) men and 4 (54.54%) women. Grade 1 hypersensitivity was common in the

elderly and was detected in 10 (45.45%) people, including 4 (36.36%) men and 6 (54.54%) women. This pathology of the 2nd degree was less often diagnosed in old age. Thus, grade 2 hypersensitivity was detected in 9 (40.91%) people, 4 (36.36%) men and 5 (45.45%) women. Rarely in elderly people there was hypersensitivity of the 3rd degree - in 12.48% (in 3 people, including 1 (9.09%) men and 2 (18.18%) women). The index of hypersensitivity prevalence (PIDH) of more than 25% was detected in elderly people in 11 cases (50%), including 6 (54.54%) men and 5 (45.45%) women. In the remaining 11 (50%) people, including 5 (45.45%) men and 6 (54.54%) women, the PDH index was up to 25%, which indicated the frequent presence of localized forms of hypersensitivity of hard tooth tissues in elderly patients. The index of intensity of dental hypersensitivity (IIG) did not depend on gender and averaged 1.39+0.15 in elderly people, which indicated that they had grade 1 hypersensitivity.

Conclusions. Thus, our studies have shown that hypersensitivity of hard dental tissues in middle-aged people occurs in both localized and generalized forms, with a pronounced intensity of hypersensitivity, and is often not associated with the loss of hard dental tissues. And hypersensitivity in the elderly occurs in both localized and generalized forms, with low intensity of hypersensitivity, and is mainly associated with the loss of hard tissues of the teeth. Moreover, the severity of the course of dental hypersensitivity decreases with age, which is confirmed by the indices of the prevalence and intensity of dental hypersensitivity. People of older age groups, who more often than middle-aged people, suffer from dental hypersensitivity with the loss of their hard tissues, more often require therapeutic and preventive interventions aimed at eliminating the symptom of hypersensitivity of teeth, restoring lost hard tissues of teeth through therapeutic dental measures or dental prosthetics, as well as complex treatment of periodontal pathology accompanied by loss of bone tissue alveolar processes (arches) of the jaws.

References:

1. Mehta D., Venkata S. Clinical trial of tooth desensitization prior to in-office bleaching / Pubmed, 2013. URL: http://onlinelibrary.wiley.com/
2. .Addy, M. The role of toothpaste in the aetiology and treatment of dentine hypersensitivity / M. Addy, N. X. West // Monographs in Oral Science. - 2013. - Vol. 23. - P. 75-87.
3. Sundaram, G. Trial of protective effect of fissure sealants in vivo on the palatal surfaces of anterior teeth, in patients suffering from erosion / G. Sundaram, R. Moazzez, D. Bartlett // Journal of Dentistry. - 2011. - № 39. - P. 26-29.
4. Shurova N.N., Shkarednaya O.V., Gazhva S.I./Experimental study of structural changes in hypersensitive dentin after the use of desensitive drugs for professional and home use//The Journal of scientific articles “Health and Education Millennium", 2017. Vol. 19. No. 11
5. Khodzhaeva D. I. Changes in the Vertebral Column and Thoracic Spinecells after Postponement of Mastoectomy //International Journal of Innovative Analyses and Emerging Technology. – 2021. – T. 1. – №. 4. – C. 109-113.
6. Ilkhomovna K. D. Modern Look of Facial Skin Cancer //Барқарорлик ва Етакчи Тадқиқотлар онлайн илмий журнали. – 2021. – Т. 1. – №. 1. – С. 85-89.
7. Ilkhomovna K. D. Morphological Features of Tumor in Different Treatment Options for Patients with Locally Advanced Breast Cancer //International Journal of Innovative Analyses and Emerging Technology. – 2021. – T. 1. – №. 2. – C. 4-5.
8. Khodjayeva D. I. MORPHOLOGY OF IDIOPATHIC SCOLIOSIS BASED ON SEGMENT BY SEGMENT ASSESSMENT OF SPINAL COLUMN DEFORMITY //Scientific progress. – 2022. – T. 3. – №. 1. – C. 208-215.

9. Ходжаева Д. И. СОВРЕМЕННЫЕ ВОЗМОЖНОСТИ УЛЬТРАЗВУКОВОЙ ДИАГНОСТИКИ ПРИ РАКЕ КОЖИ ЛИЦА //Жизнеобеспечение при критических состояниях. – 2019. – С. 111-112.
10. Aslonov S. G. et al. Modern Approaches to Oropharyngeal Cancer Therapy //International Journal of Discoveries and Innovations in Applied Sciences. – 2021. – Т. 1. – №. 3. – С. 38-39.
11. Khodjaeva D. I. MAGNETIC-RESONANCE IMAGING IN THE DIAGNOSIS OF BREAST CANCER AND ITS METASTASIS TO THE SPINAL COLUMN //Scientific progress. – 2021. – Т. 2. – №. 6. – С. 540-547.
12. Ilkhomovna K. D. MANIFESTATIONS OF POST-MASTECTOMY SYNDROME, PATHOLOGY OF THE BRACHIAL NEUROVASCULAR BUNDLE IN CLINICAL MANIFESTATIONS //Innovative Society: Problems, Analysis and Development Prospects. – 2022. – С. 225-229.
13. Sultonova N. A. Treatment of hypercoagulable conditions in women with misscarriage in early gestation //Asian Journal of Multidimensional Research (AJMR). – 2020. – Т. 9. – №. 12. – С. 13-16.
14. Султонова Н. А. ИНДИВИДУАЛЬНЫЙ ПОДХОД К ПРОГНОЗИРОВАНИИЮ САМОПРОИЗВОЛЬНЫХ ВЫКИДЫШЕЙ У ЖЕНЩИН ДО 24 НЕДЕЛЬ ГЕСТАЦИИ //Современные вызовы для медицинского образования и их решения. – 2021. – Т. 406.
15. Султонова Н. А. ПРОГНОСТИЧЕСКИЕ КРИТЕРИИ САМОПРОИЗВОЛЬНЫХ ВЫКИДЫШЕЙ В СТРУКТУРЕ ПРЕВЫЧНОГО НЕВЫНАШИВАНИЯ НА РАННИХ СРОКАХ БЕРЕМЕННОСТИ НА ФОНЕ ПАНДЕМИИ COVID-19 //ЎЗБЕКИСТОН РЕСПУБЛИКАСИ СОҒЛИҚНИ САҚЛАШ ВАЗИРЛИГИ ТОШКЕНТ ТИББИЁТ АКАДЕМИЯСИ. – С. 60.
16. Султонова Н. А., Негматуллаева М. Н. Значимость Применения Витамина И Минеральной Комплексной Терапии В Профилактике Невынашивания Беременности //CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES. – 2021. – С. 388-392
17. Харибова Е. А., Тешаев Ш. Ж. Морфофункциональные особенности тканевой организации энтероэндокринных клеток в возрастном аспекте //Проблемы биологии и медицины. – 2020. – №. 2. – С. 168-173.
18. Харибова Е. А. Особенности морфологии нейрональных ансамблей в тройничном узле человека //Морфология. – 2011. – Т. 140. – №. 5. – С. 123-124.
19. Махмудов З. А., Нечай В. В., Харибова Е. А. Железисто-лимфоидные взаимоотношения в стенке илеоцекального перехода на разных этапах постнатального онтогенеза //Морфология. – 2008. – Т. 133. – №. 2. – С. 85.
20. Адизова Д. Р., Адизова С. Р., Иброхимова Д. Б. Место депрессивных расстройств у пациенток с хронической сердечной недостаточностью //Биология и интегративная медицина. – 2021. – №. 4 (51). – С. 79-90.
21. Адизова Д. Р., Джураева Н. О., Халилова Ф. А. ROLE OF DEPRESSION AS A RISK FACTOR IN THE COURSE OF CHRONIC HEART FAILURE //Новый день в медицине. – 2019. – №. 4. – С. 15-18.
22. Adizova D. R. et al. Rational approach to standard therapy //Central Asian Journal of Pediatrics. – 2019. – Т. 2. – №. 2. – С. 49-53.
23. Адизова Д. Р., Иброхимова Д. Б., Адизова С. Р. Приверженность лечению при хронической сердечной недостаточности //Биология и интегративная медицина. – 2020. – №. 6 (46). – С. 112-122.

24. Rakhmatovna T. D. Enterobiosis in Children Current Diagnostic Problems //European Multidisciplinary Journal of Modern Science. – 2022. – Т. 7. – С. 89-95.
25. Rakhmatovna T. D. HELICOBACTER PYLORI IN CHILDREN WITH GASTRIC DYSPEPSIA SYNDROME //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 155-159.
26. Rakhmatovna T. D. Enterobiosis in Children Current Diagnostic Problems //European Multidisciplinary Journal of Modern Science. – 2022. – Т. 7. – С. 89-95.
27. Rakhmatovna T. D. CLINICAL AND EPIDEMIOLOGICAL ASPECTS OF THE COURSE OF ENTEROBIOSIS IN SCHOOL-AGE CHILDREN //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – С. 95-98.
28. Rakhmatovna T. D. HELICOBACTER PYLORI IN CHILDREN WITH GASTRIC DYSPEPSIA SYNDROME //BARQARORLIK VA YETAKCHI TADQIQOTLAR ONLAYN ILMIY JURNALI. – 2022. – Т. 2. – №. 3. – С. 155-159.
29. Abdikaxhorovna K. F. Characteristics and Immunological Status of Chronic Jaundice in Infants Born to Mothers Who Passed Covid-19 //EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE. – 2022. – Т. 2. – №. 4. – С. 38-41.
30. Kurbanovna S. I. Functioning of the Immune System in Children, After Surgical Correction of Congenital Heart Defects //European Journal of Life Safety and Stability (2660-9630). – 2021. – Т. 12. – С. 439-446.
31. Sadulloeva I. K. Ashurova NG CLINICAL AND IMMUNOLOGICAL FEATURES OF CONGENITAL HEART DEFECTS IN ADOLESCENT GIRLS //Europe's Journal of Psychology. – 2021. – Т. 17. – №. 3. – С. 172-177.
32. Тешаев Ш. Ж., Хасанова Д. А. Сравнительная характеристика морфологических параметров лимфоидных структур тонкой кишки крыс до и после воздействия антисептика-стимулятора Дорогова фракции 2 на фоне хронической лучевой болезни //Оперативная хирургия и клиническая анатомия (Пироговский научный журнал). – 2019. – Т. 3. – №. 2. – С. 19-24.
33. Тешаев Ш. Ж., Хасанова Д. А. Макроскопическое строение пейеровых бляшек тонкой кишки крысы и изменения кишки при воздействии хронического облучения //Оперативная хирургия и клиническая анатомия (Пироговский научный журнал). – 2020. – Т. 4. – №. 1. – С. 41-45.
34. Тешаев Ш. Ж. и др. Морфологические изменения лимфоидных структур тонкой кишки крыс при хронической лучевой болезни //Морфология. – 2019. – Т. 155. – №. 2. – С. 278-278.